



TimberID™

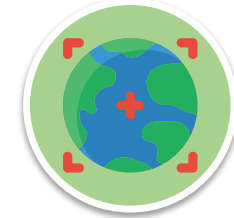
EUDR Challenges



DUE-DILIGENCE
STATEMENTS



PROVENANCE
VERIFICATION



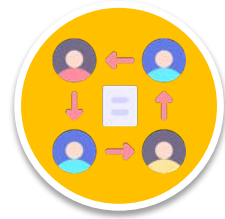
GEO-SPATIAL
DATA



REGULATORY
COMPLIANCE
DOCUMENTS



DATA PROTECTION
ACCESS LIMITATION



INFORMATION
GATHERING



ENVIRONMENTAL
& SOCIAL IMPACT



RISK ASSESMENT/
MITIGATION



TimberID Story

Deeplai is at the forefront of climate change technology launching the TimberID solution for sustainable forest management and reporting.

TimberID Platform

- ✔ The TimberID Platform is a robust flexible timber supply chain solution to ensure EUDR compliance
- ✔ Our workflow automation of the information gathering, processing, securing privacy and selective data sharing, all to DDSt creation and submission to the EU portal.

TimberID Authentication

The authentication process is an AI-driven deep-tech solution for harvested timber log identification and data processing delivering an accurate and transparent timber traceability, based on geo-location provenance proof.

- ✔ **Tamper-proof** - encrypting satellite data and delivering - 100% authentication.
- ✔ **Eco-friendly process stability** - elimination of any consumables.
- ✔ **Cost-effective** - total cost of ownership, that is at least 50% lower than currently available technologies.



TimberID™

Problem
Solving

What are the challenges for a safe and effective EUDR execution?

- EU Information System is a simple reporting tool and cannot be used to document traceability information - additional platform is needed
- Data security and privacy and ability to selectively release data (e.g. only geo-location of harvest parcels)
- Different countries have different risk levels - documented risk mitigation measures need to be adaptable to the risk situation
- Accumulated geolocation data needs to be provided for large processors automatically and in time based on the reported input
- Effort to map transactions must be very low
- Interaction with EU information system needs to be as automated as possible - best case: automated issuance of DDS
- Large traders need to be able to check the due diligence efforts of upstream suppliers
- Possibility to segregate wood of unknown origin reduces potential financial risks (of dumping mixed stock or announcing non-compliance to downstream customers)

TimberID Platform - document workflow

TimberID Authentication – geo-location proof



TimberID
Platform

TimberID Platform will solve the EUDR execution challenges.

Highlights of TimberID Platform functionality

- ✔ Secure, scalable, reliable system architecture
- ✔ Data privacy and security, selective sharing
- ✔ Collection of data, documents and information
- ✔ Geo-spatial data map evidence and view
- ✔ Data management, processing and reporting interfaces
- ✔ Risk assessment & mitigation covered by system
- ✔ Due Diligence Statement on transaction level
- ✔ Dedicated mobile apps for data sourcing and management
- ✔ BigData analytics and reporting

Stakeholders covered by the EUDR

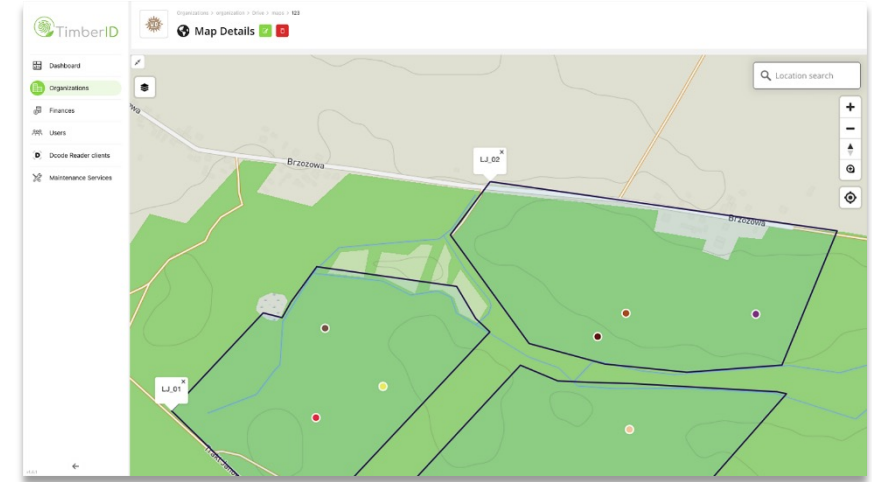
- ✔ Operators/importers into EU
- ✔ Operators/ Forest owners(service companies)/Large traders(non SME) within EU
- ✔ Operators/ Forest owners(service companies)/All trader (incl. SME) EU export



TimberID
Geo-Spatial
Data



Sattelite sourced data



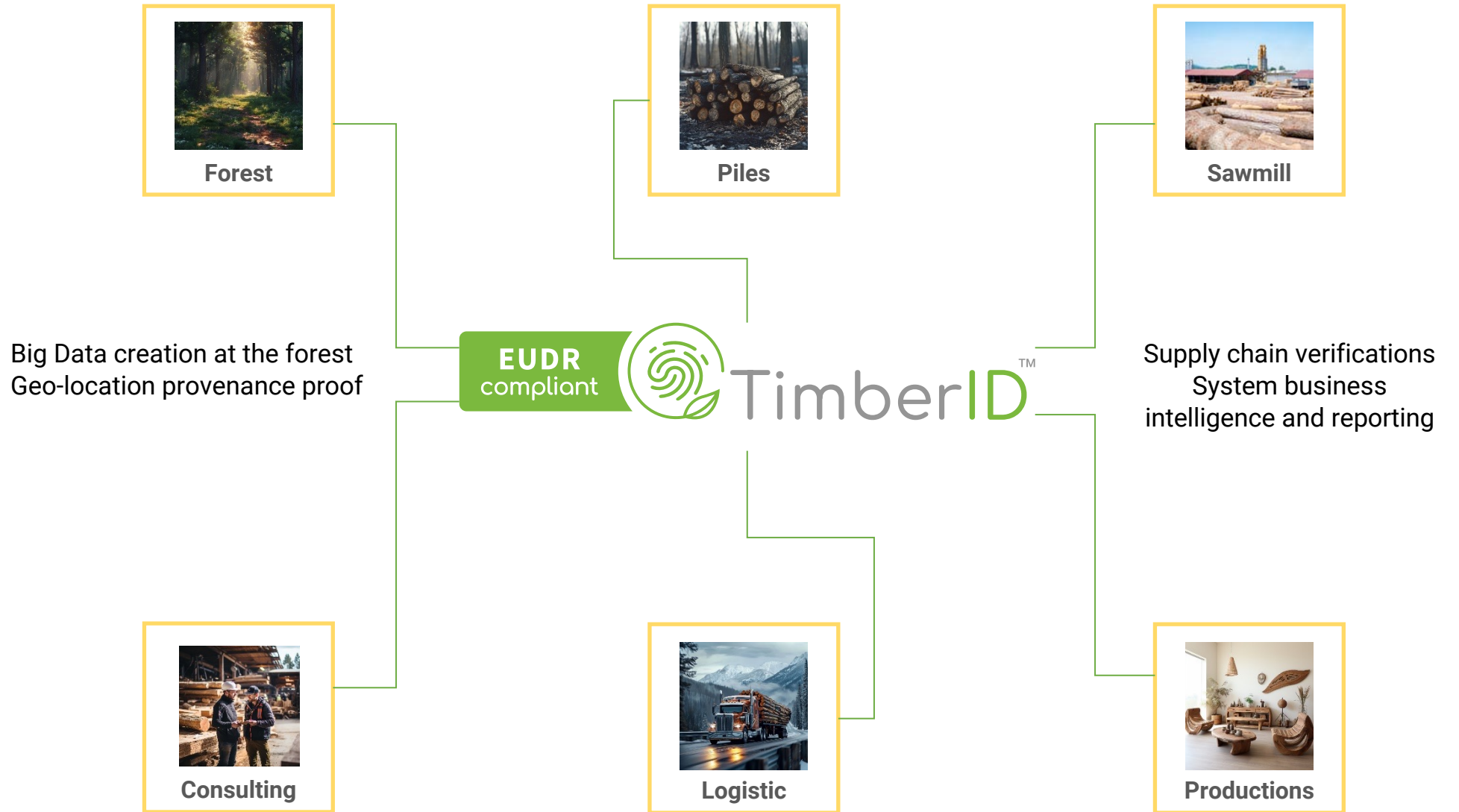
Ground sourced data

Meeting the EUDR requirement for geo-spatial data are for the forest plot sized below 4 ha requires a spot geo-location, polygon coordinates for all plots exceeding the size.

- ✔ The **TimberID Platform** allows easy registration of plots by suppliers, operators, or third parties acting as authorized representatives.
- ✔ The platform can upload plots manually or in digital formats and can be used for verification of provenance. The system ensures data protection and market access to the European market, regardless of location or stage of the supply chain.
- ✔ **TimberID Platform** provides the evidence, the platform enables forest plot map display and view of harvested timber log location and further verification of logistic movements.



TimberID
Supply Chain





TimberID
Technology



The **TimberID** Authentication system enables forestry organizations and participants in the forest market to adhere to timber provenance regulations, ensuring transparent traceability **from the forest to the consumer**.

TimberID Authentication is a ground-breaking DeepTech solution combining AI/ML image processing, analysis and recognition with a proprietary unique variable code marking technology, **delivering ~100% accuracy in data processing**.



Fingerprint Signature

Unique timber ring fingerprint capture and recognition plus Timber log measurements.



Encrypted information

Dcode is securing a geo-localization accuracy on a 2m level, timestamp accuracy to a one second level.



Timber Identification

Digitised 100% provenance authentication system web AI/ML enabled business intelligence platform.



TimberID™

TimberID
Dcode
Technology



Tamper-proof, unfakeable data

Dcode is generated while being applied by encrypting satellite geo-location data and intending a unique variable mark on the timber ring. A fingerprint surface signature data record is created by an app. A combination of both technologies delivers 100% authentication proof.



Eco-friendly process stability

The solution excludes any consumables as plastic, metal, ink, foil, RFID and is based on a used for centuries indentation mark. Environmental care eliminating the pollution at the sawmill production.



EU Deforestation Regulation compliant

Provenance traceability to the source.
Provenance traceability to the forest plot with exact geo-location data, providing supply chain verifications, from the forest to the final wooden product.

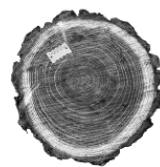
Existing marking solutions that could be cost-effectively replaced



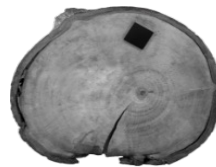
RFID



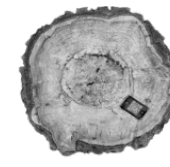
Paint



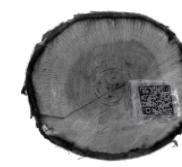
Metal



Electronic



Plastic



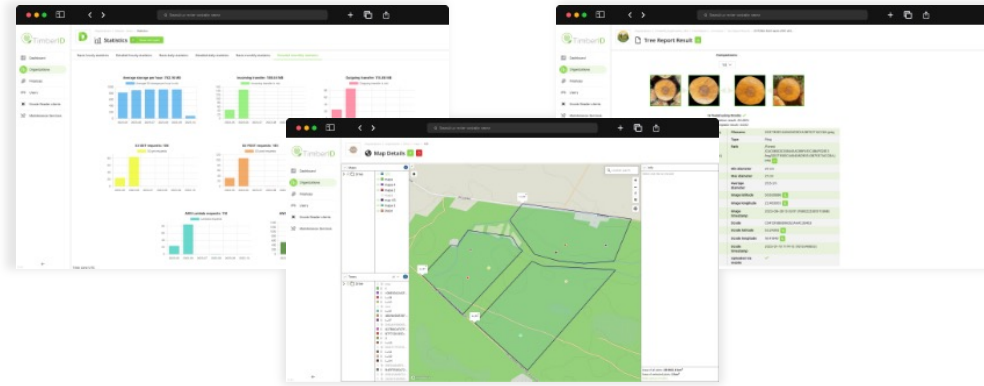
Foil



Dcode



TimberID
Software
&
Mobile Apps



TimberID SaaS Platform

- ✔ Secure, scalable, reliable system architecture
- ✔ Data privacy and security
- ✔ Digital document creation and selective sharing
- ✔ Collection of data, documents, and information
- ✔ Geo-spatial data map evidence and view
- ✔ Data management, processing and reporting interfaces

Dedicated Mobile Apps

TimberID (IOS only)

- ✔ Image sourcing, record creation
- ✔ Registration of harvesting plots
- ✔ Species registration
- ✔ Log measurements automation
- ✔ Dcode verification linked with the SaaS platform
- ✔ Dcode reader (IOS, Android)
- ✔ Dcode encrypting data reader
- ✔ Data export as an item list file





Summary

TimberID complete solution meets and solves all EUDR objectives bringing digitalisation in sustainable forest management.



Safe and effective EUDR execution

- ✔ Data security and privacy, selectively release of data
- ✔ Documented risk assessment and mitigation measures
- ✔ Accumulated geolocation data
- ✔ Due diligence efforts of upstream suppliers
- ✔ Segregation of unknown origin wood